

These one-day field clinics are designed to improve the agronomic management skills of industry personnel, extension and public agents, crop consultants, and producers. Specialists from Penn State and the agricultural community will provide hands-on diagnosis training in crop production, pest management, soil fertility, and soil and water conservation. Participants will be involved in a variety of topics and have ample opportunity to diagnose, solve, and discuss crop management problems and situations, and evaluate new and alternative management strategies. Practical information about interacting factors (nutrients, pests, environmental stress) that effect crop management and are unique to Northeastern agriculture can be discussed. In addition to gaining practical agronomic knowledge, CCA, nutrient management, and pesticide applicator license credits can be obtained. *(There will be a total of 5 CCA credits that can be acquired in CM, PM, and SW.)*

This year's clinic will be similar to past programs and will focus on various topics relating to crop and soil management. As always, there will be time for discussion and hands-on participation. The program is designed to allow participants to attend all of the sessions and will include:

#### ► Soil Genesis/Inherent Properties Related to Crop Production and Soil Management

Understanding the genesis of the soils on a farm provides important knowledge that affects the management of farm fields. This session covers soils forming processes and the techniques used to understand how soil forms. We will then apply this knowledge to crop management.  
Certified Crop Adviser CEUs: 1.0 SW  
*Instructors:* Dr. Patrick Drohan and Don Rill

#### ► Soil Quality and Effects of Cover Crop Roots

Crop roots can stimulate soil aggregation as well as contribute to development of macro-pores. Root architecture plays an important role as well as when active root growth takes place. A new concept we use in no-till systems development is to design crop rotations that have active root growth throughout the year. In this session we will explore root systems of different crops and cover crops and how this knowledge can be used to develop crop rotations that improve soil quality.  
Certified Crop Adviser CEUs: 1.0 SW  
*Instructor:* Dr. Sjoerd Duiker



[Please register before July 16 to avoid a late fee]

#### ► Corn and Soybean Disease Update

With increased prices of corn and soybeans, fungicide applications are more affordable – but are they necessary? This topic and other current issues with corn and soybean disease management will be discussed at this station.  
Certified Crop Adviser CEUs: 1.0 PM  
*Instructors:* Dr. Pierce Paul (Ohio State University) and Justin Dillon

#### ► Pest Management Using Seed Traits and Seed Treatments

This session will feature hands-on training on how to assess the effectiveness of pest-management traits in corn. Participants will wash roots from corn plots with different treatments, looking for signs of rootworm feeding. In addition, a top-growth assessment will be made to evaluate damage from European corn borer. Based on observations during these assessment, participants will determine which plots utilized hybrid traits versus conventional hybrids. A discussion on proper use and management of hybrid traits will be held after the interactive session.  
Certified Crop Adviser CEUs: 0.5 PM/0.5 CM  
*Instructors:* Del Voight and Dr. John Tooker

#### ► Herbicide Mode of Action and Resistant Weeds

Understanding herbicide mode of action is important when planning resistance management programs. At this station we will demonstrate and discuss the strengths and weaknesses of different herbicide modes of action and how to best choose herbicides in different action groups so mixtures or rotations of active ingredients can be planned to better manage weeds and reduce the potential for resistant species. Participants will have opportunity to test their herbicide symptomology skills.  
Certified Crop Adviser CEUs: 1.0 PM  
*Instructors:* Dr. Bill Curran and Dwight Lingenfelter

The registration fee of **\$60.00/person** covers lunch, refreshments, and support materials.  
***(Late registration fee is \$80 for reservations made after July 16)***

Please register for the Clinic **on-line** or via **mail** or **FAX** (814) 865-7050 by completing the form. ***Please register by July 16 so that we can determine our material and luncheon needs.***

***To register on-line, visit:***

<http://cropsoil.psu.edu/extension/clinic.cfm>

***Credit card payments will be accepted!***



For more info and to register on-line see:  
<http://cropsoil.psu.edu/extension/clinic.cfm>



#### 2008 Penn State Agronomic Field Diagnostic Clinic

*You are invited to attend one of the programs:*

#### 1. Name and contact information of primary registrant:

Name \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_

Phone \_\_\_\_\_

#### 2. Choose a date and indicate how many are attending:

Tues., July 22 \_\_\_ or Wed., July 23 \_\_\_  
Number attending \_\_\_\_\_

#### 3. Total payment amount (\$60.00 per person): \$ \_\_\_\_\_ (Late registration fee is \$80 after July 16)

Indicate payment method

☐ Check enclosed (payable to Penn State University)  
or ☐ VISA ☐ Mastercard ☐ Discover ☐ American Express

Card Number \_\_\_\_\_

Expiration date (month/year) \_\_\_\_\_

Name (first and last, as it appears on card– please print) \_\_\_\_\_

Cardholder Address \_\_\_\_\_

Cardholder email \_\_\_\_\_  
(confirmation email will be sent as receipt)

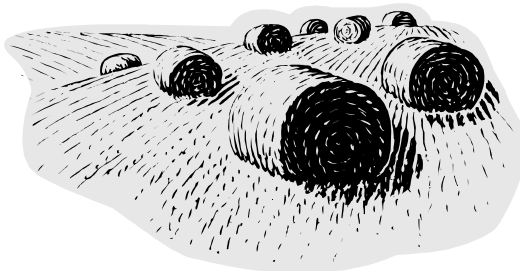
Cardholder phone \_\_\_\_\_  
(Credit card registrations can be submitted on-line, mailed, or faxed – see contact info below.)

To register, please mail or fax this registration form by **July 16** to:

PSU Agronomic Field Diagnostic Clinic  
Office of Conf./Short Courses Phone: 814-865-8301  
Penn State University FAX: 814-865-7050  
301B Ag Administration Building  
University Park, PA 16802  
Email: [shortcourse@psu.edu](mailto:shortcourse@psu.edu)

# 2 PennState 0 Agronomic 0 Field 8 Diagnostic Clinic

presented by: Crop Management Extension Group  
**PENNSTATE CMEG**



**Tuesday, July 22 and  
Wednesday, July 23, 2008  
9 a.m. – 4:30 p.m.**

## **Agronomy Research Farm**

Russell E. Larson Agricultural Research  
Center, Rock Springs, PA

PENNSTATE



College of Agricultural Sciences  
Cooperative Extension

Issued in furtherance of Cooperative Extension Work, Acts of Congress May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture and the Pennsylvania Legislature. D.G. Jackson, Director of Cooperative Extension, The Pennsylvania State University.

Penn State encourages persons with disabilities to participate in its programs and activities. If you anticipate needing any type of accommodation or have questions about the physical access provided, please contact the Crop and Soil Sciences Department at (814) 865-6541 in advance of your participation to visit.

The Pennsylvania State University is committed to the policy that all persons shall have equal access to programs, facilities, admission, and employment without regard to personal characteristics not related to ability, performance, or qualifications as determined by University policy or by state or federal authorities. The Pennsylvania State University does not discriminate against any person because of age, ancestry, color, disability or handicap, national origin, race, religious creed, sex, sexual orientation, or veteran status. Direct all inquiries regarding the nondiscrimination policy to the Affirmative Action Director, The Pennsylvania State University, 201 Willard Building, University Park, PA 16802-2801; tel. (814) 863-0471.

**Registration begins at 8:45 am at the  
Agronomy Farm site**



The PSU Agronomy Farm (Gate D) at the Russell E. Larson Ag Research Center is located 9 miles southwest of State College on Rt. 45.

<http://cropsoil.psu.edu/extension/clinic.cfm>

Dwight D. Lingenfelter  
Extension Agronomist